Calumet City

Hazard Mitigation Plan Point of Contact

Primary Point of Contact	Alternate Point of Contact
Peter Bendinelli, Deputy Fire Chief	Glenn Bachert, Fire Chief
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Calumet City, IL 60409	Calumet City, IL. 60409
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Jurisdiction Profile

The following is a summary of key information about the jurisdiction and its history:

Date of Incorporation: 1893

Current Population: The 2020 U.S. Census population was 36,045. The 2022 U.S. Census estimate indicated the population was 34,709.

Population Growth: The overall population has decreased 4.22 percent between 2018 and 2022.

Location and Description: The City of Calumet City (commonly known as Cal City) is located within the state of Illinois and County of Cook. In addition to being bordered to the east by Hammond, Indiana, the City is also bordered by the City of Burnham and City of Chicago to the north, City of Lansing to the south, and Cities of South Holland and Dolton to the west. The City encompasses a total of 7.31 square miles (approximately 7.18 sq. mi of land and 0.12 sq. mi. of water).

Brief History: The region's earliest inhabitants, the Indians, were a semi-nomadic people who came from Asia across the land bridge now drowned by the Bering Strait. These prehistoric Indians were known to have passed through the region in order to migrate to warmer climates. Memories of the "City of West Hammond," as Calumet City used to be known, include everything from people who sparked community spirit to the bootleggers who defied prohibition to run illegal drinking parlors along State Street. Calumet City was shaped by memorable people such as the Schrum Family, who were among the first settlers, and Faith Bailey, a nurse who was a crusader in public health. A second fire department was established in order to protect the entire Calumet City territory, and one of the greatest improvements was the construction of an electric light plant that was expanded to provide street and incandescent lighting. After the great fire of 1901 that destroyed the only major industry in West Hammond at the time, the G.H. Hammond Meat Packing Plant, other industries had to step up to fill the economic gap left behind. Some of the businesses that helped the community recover included the Hirsch Stein Starch Company, Bernard J Burczyk's Printing Company and the West Hammond Brewing Company. Calumet City also progressed in the areas of real estate, construction, public safety and industry. In the early 1900s, the population more than doubled. Land was acquired to build a two-story brick building that still houses City Hall today.

Climate: The climate in Calumet City, Illinois, is classified as humid continental, with all four seasons distinctly represented: wet springs; hot, often humid summers; pleasant autumns; and cold winters. The average rainfall is 35 inches, and the average amount of days with precipitation are 118. Annual precipitation is average - reaching its lowest points in the months of January and February and peaks in the months of May and June. Winter proves quite variable - seasonal snowfall in the City has ranged from 9.8 inches (1920–21) up to 89.7 inches (1978–79).

Governing Body Format: Calumet City uses a Home-Rule Charter, Council-Mayor form of government, and is located in the Illinois 2nd Congressional Districted. Local elected officials (Mayor, Treasurer, City Clerk, and seven Aldermen) run for election every four years. This body will assume the responsibility for the adoption and implementation of this plan. Department heads (which can be found on the City's website) report directly to the Mayor. Department heads include: Community & Economic Development/Housing; Engineering; Community Schools & Churches; Department of Ethics and Professional Standards; Department of Inspectional Services; Department of Law; Emergency Services and Disaster Agency; Fire Department; Office of the Health Commissioner; Office of Independent Inspector General; Parks & Recreation; Police Department; Public Works; and Purchasing/Personnel.

Development Trends: The City of Calumet City has taken a very assertive approach in redefining the business community by establishing and implementing various economic tools including Tax Increment Financing (TIF), Enterprise Zone, Cook County Tax Incentives, Special Service Districts, and securing various other funding resources relative to business and economic development. In addition, the City of Calumet City has Home Rule Status, as previously noted. The business community serves not only those who reside in Calumet City, but also hundreds of thousands who reside in the 15-mile radius that make Calumet City's mega shopping districts their destination. Calumet City has a rich cultural history with successful implementation of community, beautification and city marketing programs. The community is located just south of the City of Chicago and borders Northwest Indiana with highway access to I-94/ I-80 and minutes from Interstates 294, I-57 and I-55. These routes give ready access to Chicago and Chicago's northwest and western suburbs, along with central Illinois, Wisconsin, Indiana and Michigan. Additionally, rail and waterway accessibility is predominant within the industrial business districts. The City of Calumet City supports and follows the planning recommendations of CMAP (Chicago Metropolitan Agency for Planning) – the GO TO 2040 Plan.

Changes in Community Priorities: We have recognized that our citizens need to be better educated on insurance option available to them.

Capability Assessment

The assessment of the jurisdiction's legal and regulatory capabilities is presented in the *Legal and Regulatory Capability Table* below. The assessment of the jurisdiction's fiscal capabilities is presented in the *Fiscal Capability Table* below. The assessment of the jurisdiction's administrative and technical capabilities is presented in *Administrative and Technical Capability Table* below. Information on the community's National Flood Insurance Program (NFIP) compliance is presented in the *National Flood Insurance Program Compliance Table* below. Classifications under various community mitigation programs are presented in the *Community Classifications Table* below.

TABLE: LEGAL AND REGULATORY CAPABILITY					
	Local Authority	State or Federal Prohibitions	Other Jurisdictional Authority	State Mandated	Comments
Codes, Ordinanc	es & Requirem	ents			
Building Code	Yes	No	No	Yes	Calumet City Municipal Code, Sec. 14- 22, adopted: 2007
Zonings	Yes	No	No	Yes	Calumet City Municipal Code, Appendix B Sec II, adopted: 1983
Subdivisions	Yes	No	No	No	Calumet City Municipal Code, Appendix A, adopted: 1980
Stormwater Management	Yes	No	Yes	Yes	State regulates industrial activity from Construction sites 1 acre or larger under section 402 CWA. Calumet City Municipal Code, Sec. 34-64. Erosion and sediment control, adopted: 10-12-2000
Post Disaster Recovery	No	No	No	No	
Real Estate Disclosure	No	No	Yes	Yes	(765 ILCS 77/) Residential Real Property Disclosure Act.
Growth Management	Yes	No	No	No	Calumet City Municipal Code, Sec. 18, adopted: 2001
Site Plan Review	Yes	No	No	No	Calumet City Municipal Code, Sec. 34- 35, adopted: 2000

					Cook County
Public Health and Safety	No	No	Yes	Yes	Cook County Board of Health.
Environmental Protection	Yes	No	No	No	Calumet City Municipal Code 2-161 adopted: 1980 Calumet City Municipal Code Chapter 26
Planning Docume	ents		T		
General or Comprehensive Plan	Yes	No	No	No	Last updated on June 14, 2023
Is the plan equipp	ed to provide in	tegration to this m	nitigation plan?		It will
Floodplain or Basin Plan	No	No	No	No	Sec. 33-34
Stormwater Plan	No	No	MWRD	No	Regional stormwater impacts are managed by MWRD. The Village lies within the Little Calumet River watershed planning area of MWRD's comprehensive Stormwater Master Planning Program
Capital Improvement Plan	Yes	No	No	No	Calumet City CIP
What types of capital facilities does the plan address?				Detention ponds, fresh water, booster station, water tanks, pumping station, 6 million gallon reservoir.	
How often is the plan revised/updated?				On a yearly basis.	
Habitat Conservation Plan	Yes	No	No	No	Calumet City Municipal Code Sec. 34- 65, Adopted 2000

Economic Development Plan	No	No	Yes	Yes	The Economic Development Commission is charged with reviewing all economic development related programs and incentives including tax incentives offered through the Cook County 6b program
Shoreline Management Plan	No	No	No	No	
Response/Recov	ery Planning	T	<u> </u>	T	
Comprehensive Emergency Management Plan	No	No	Yes	Yes	Cook County EMRS
Threat and Hazard Identification and Risk Assessment	No	No	Yes	No	Cook County EMRS Preparing THIRA
Terrorism Plan	No	No	Yes	Yes	Cook County EMRS
Post-Disaster Recovery Plan	No	No	No	No	
Continuity of Operations Plan	No	No	Yes	No	Cook County EMRS
Public Health Plans	No	No	Yes	No	Cook County DPH

TABLE: FISCAL CAPABILITY	
Financial Resources	Accessible or Eligible to Use?
Community Development Block Grants	Yes
Capital Improvements Project Funding	Yes
Authority to Levy Taxes for Specific Purposes	Yes
User Fees for Water, Sewer, Gas or Electric Service	Yes
Incur Debt through General Obligation Bonds	Yes
Incur Debt through Special Tax Bonds	Yes
Incur Debt through Private Activity Bonds	No
Withhold Public Expenditures in Hazard-Prone Areas	No
State Sponsored Grant Programs	Yes

Development Impact Fees for Homebuyers or Developers	No
Other	Yes

TABLE: ADMINISTRATIVE AND TECHNICAL CAPABILITY			
Staff/Personnel Resources	Available?	Department/Agency/Position	
Planners or engineers with			
knowledge of land development	Yes	City Engineer	
and land management practices			
Engineers or professionals trained			
in building or infrastructure	Yes	City Engineer	
construction practices			
Planners or engineers with an	Yes	City Engineer	
understanding of natural hazards	100	Only Engineer	
Staff with training in benefit/cost	Yes	City Treasurer	
analysis		,	
Surveyors	Yes	City Engineer	
Personnel skilled or trained in GIS	Yes	Cook County GIS Consortium	
applications	100	Cook County Old Consolition	
Scientist familiar with natural	No	Emergency Service & Disaster Agency	
hazards in local area	140	Emorganiay dervice & Disaster Agentay	
Emergency manager	Yes	Emergency Service & Disaster Agency	
Grant writers	Yes	Economic Development Department	

TABLE: NATIONAL FLOOD INSURANCE PROGRAM COMPLIANCE	
What department is responsible for floodplain management in your jurisdiction?	Emergency Services and Disaster Agency
Who is your jurisdiction's floodplain administrator? (department/position)	Leonard Chiaro, Director Emergency Services and Disaster Agency
Are any certified floodplain managers on staff in your jurisdiction?	No
What is the date of adoption of your flood damage prevention ordinance?	August 14, 2008
When was the most recent Community Assistance Visit or Community Assistance Contact?	September 25, 2013
Does your jurisdiction have any outstanding NFIP compliance violations that need to be addressed? If so, please state what they are.	No
Do your flood hazard maps adequately address the flood risk within your jurisdiction? (If no, please state why)	Yes
Does your floodplain management staff need any assistance or training to support its floodplain management program? If so, what type of assistance/training is needed?	No
Does your jurisdiction participate in the Community Rating System (CRS)? If so, is your jurisdiction seeking to improve its CRS Classification? If not, is your jurisdiction interested in joining the CRS program?	Yes ongoing

NFIP Participation Activities

Maintaining compliance under the NFIP is an important component of flood risk reduction. All planning partners that participate in the NFIP have identified actions to maintain their compliance and good standing. Cook County entered the NFIP on April 15, 1981. Structures permitted or built in the County before then are called "pre-FIRM" structures, and structures built afterwards are called

"post-FIRM." The insurance rate is different for the two types of structures. The effective date for the current countywide FIRM is August 19, 2008. This map is a DFIRM (digital flood insurance rate map). The communities in Cook County that participate in the NFIP are shown in *Table: NFIP Participating Communities in Cook County* in *Volume I* of the Cook County MJ-HMP.

The NFIP makes federally-backed flood insurance available to homeowners, renters, and business owners in participating communities. The communities in Cook County that participate in the NFIP and their "Policies in Force," "Total Coverage," and "Total Written Premiums" are shown in *Table: Cook County Flood Insurance Policies* in **Volume I** of the Cook County MJ-HMP.

The following are NFIP-related activities completed by our community:

- Our staff provide the following services: permit reviews, GIS, inspections, engineering capability.
- Our community teaches property owners or other stakeholders about the importance of flood insurance through public outreach events, workshops, and/or seminars.
- Our community enforces local floodplain regulations and monitors compliance.
- Our floodplain development regulations meet or exceed Federal Emergency Management Agency (FEMA) or State minimum requirements.

Though our City does not have a CFM, it does outsource to an engineer firm for FP assistance.

Substantial Improvement Rule and the Substantial Damage Rule

The IDNR/OWR has developed a model ordinance for floodplain management, which has been adopted by most communities in Illinois. The ordinance includes the minimum requirements an NFIP participating jurisdiction must adopt and enforce, as well as additional higher regulatory requirements. The optional, higher regulatory standards include a minimum one foot of freeboard above the base flood elevation and cumulative tracking of damage repairs and improvements to establish substantial damage and substantial improvement compliance. Some jurisdictions have chosen to exceed the requirements of the model ordinance and have adopted more restrictive ordinances. This is most common in the communities in northeastern Illinois.

Existing Municipal Code:

Sec. 34-34 Definitions

Substantial damage means damage of any origin sustained by a structure whereby the cumulative percentage of damage during the life of the building equals or exceeds fifty (50) percent of the market value of the structure before the damage occurred regardless of actual repair work performed. Volunteer labor and materials must be included in this determination. The term includes repetitive loss buildings.

Substantial improvement means any reconstruction, rehabilitation, addition, or improvement of a structure taking place during a ten-year period in which the cumulative percentage of improvements equals or exceeds fifty (50) percent of the market value of the structure before the improvement or repair is started.

1. Substantial improvement is considered to occur when the first alteration of any wall, ceiling, floor, or other structural part of the building commences, whether or not that alteration affects

the external dimensions of the building. This term includes structures that have incurred repetitive loss or substantial damage, regardless of the actual work done.

- 2.The term does not, however, include either:
 - a. Any project for improvement of a structure to comply with existing state or local health, sanitary, or safety code specifications which are solely necessary to assure safe living conditions, or
 - b. Any alteration of a "historic structure" listed on the National Register of Historic Places or the Illinois Register of Historic Places, provided that the alteration will not preclude the structure's continued designation as a historic structure.

Sec. 34-37 Duties of the Enforcement Officials

The director of inspectional services shall be responsible for the general administration and enforcement of this chapter which shall include the following:

- (1) Upon receipt of a development permit application, the director shall review the application to determine the following:
 - (a) Whether the proposed improvements qualify as a level 1, 2 or 3 development; and
 - (b) Whether the site is within a special *flood* hazard area (SFHA). If the site is in the SFHA, the director must:
 - 1. Compare the elevation of the site to the base *flood* or 100-year frequency *flood* elevation to determine if any development located on land that can be shown to be higher than the base *flood* elevation of the current *flood* insurance rate map and which has not been filled after the date of the site's first floor insurance rate map without a permit as required by this article is not in the SFHA and, therefore, not subject to the requirements of this article. Conversely, any development located on land shown to be below the base *flood* elevation and hydraulically connected, but shown on the current *flood* insurance rate map is subject to the provisions of this article.
 - 2. Maintain documentation of the existing ground elevation at the development site and certification that this ground elevation existed prior to the date of the site's first *flood* insurance rate map identification.
- (10) Make damage determinations of all damaged buildings in the SFHA after a *flood* to determine substantially damaged structures, which must comply with this article.

Sec. 34-92 Requirements in all Special Flood Areas

- (a) *Jurisdiction*. All development projects in all types of special *flood* hazard areas shall comply with this section. Development proposed in floodways and in SFHAs without regulatory floodplain data shall also comply with the additional requirements of <u>sections 34-93</u> and <u>34-94</u>.
- (e) Protecting buildings.
 - (1) All new buildings and improvements and repairs to buildings located within a 100-year floodplain, also known as the SFHA shall be protected from *flood* damage below the FPE.
 - (2) This building protection requirement applies to the following situations:

- a. Construction or placement of a new building alteration or addition to an existing building valued at more than one thousand dollars (\$1,000.00) or seventy (70) square feet
- b. Remodeling or other activity that will result in a substantially improved building.
- c. An addition that will result in a substantially improved building.
- d. An existing building that has been substantially damaged.
- e. Installing a manufactured home on a new site or a new manufactured home on an existing site. This building protection requirement does not apply to returning a manufactured home to the same site it lawfully occupied before it was removed to avoid flood damage.
- f. Installing a recreational vehicle or travel trailer on a site for more than one hundred eighty (180) days.
- g. Construction of new buildings and substantial improvements in the 500-year floodplain.
- h. Substantial improvements or structural alterations made to an existing building that increase the floor area by more than twenty (20) percent or equal or exceed the market value by fifty (50) percent. Alteration shall be figured cumulatively during a ten-year period. If substantially improved, the existing structure and the addition must meet the *flood* protection standards of this article.
- i. Repairs made to a substantially damaged building. These repairs shall be figured cumulatively during a ten-year period. If substantially damaged the entire structure must meet the *flood* protection standards of this section.
- j. Repetitive loss to an existing building as defined in Section 34-34.
- (h) Manufactured homes and recreational vehicles.
 - (1) In addition to the requirements of subsections <u>34-92(e)</u> through <u>34-92(g)</u>, manufactured homes:
 - a. Shall have the lowest floor elevated to or above the FPE; and
 - b. Shall be anchored to resist flotation, collapse, or lateral movement by being tied down in accordance with the rules and regulations for the Illinois Mobile Home Tie-Down Act (210 ILCS 120/1 et seq.) issued pursuant to 77 Ill. Adm. Code Part 870.
 - c. In the case of manufactured homes placed or substantially improved:
 - 1. Outside of a manufactured home park or subdivision;
 - 2. In a new manufactured home park or subdivision;
 - 3. In an expansion to an existing manufactured home park or subdivision; or
 - 4. In an existing manufactured home park or subdivision on which a manufactured home has incurred substantial damage from a *flood*, the top of the lowest floor shall be elevated to or above the *flood* protection elevation.

TABLE: COMMUNITY CLASSIFICATIONS			
	Participating?	Classification	Date Classified
Community Rating System	Yes	6	April 2011
Building Code Effectiveness Grading Schedule	Yes	Unknown	April 2011

Public Protection/ISO	No	N/A	N/A
StormReady	Yes	Gold (Countywide)	2014
Tree City USA	No	N/A	N/A

Opportunities to Expand and Improve Capabilities

At this time, the municipality did not include or identify any opportunities to expand and improve capabilities. Plans will be updated in the future should this change.

Plan Integration

The capability assessment describes opportunities to "link" or integrate the mitigation plan into other planning mechanisms. The process and mechanism to identify opportunities to integrate the Cook County MJ-HMP into other planning mechanisms will occur during the Annual Update Process and be reflected in the Jurisdictional Annual Report each year. Specific plan integration opportunities will include:

- The goals and actions of the Hazard Mitigation Plan will be considered in the next capital improvement planning process.
- The hazards, goals, and actions of the Hazard Mitigation Plan will be considered in the next update of the jurisdiction's land use plans, zoning, and subdivision codes.

Emergency Plan Integration:

Cook County EMRS is supporting communities to develop and update their respective Emergency Operations Plans, Continuity of Operations Plan/Continuity of Government Plan, and Recovery Plan in 2024. This is an ongoing countywide initiative and is being implemented in all municipalities.

Emergency Operations Plan (EOP)

An EOP template was created for all municipalities. The 2019 Cook County MJ-HMP and the hazards in the mitigation plan have been integrated into the Situation and Assumptions section of the EOP. Within that section, the natural hazards based on the 2019 MJ-HMP were added in the Initial Analysis and Assessment and Identification of Hazards section of the EOP. The hazards in the 2019 plan and the 2024 MJ-HMP did not change apart from adding wildfires for the Forest Preserve and unincorporated areas of the County. Future updates of the EOP will take into consideration any additional new natural hazards that are added to subsequent updates to the MJ-HMP.

Continuity of Operations Plan (COOP)

The Continuity of Operations Plan (COOP) for the municipality includes a Situation section that is based on the 2019 Cook County MJ-HMP jurisdictional annex, and specifically the hazards identified in the annex. The COOP-specific risk assessment is hazard-specific and based on likelihood of occurrence and severity of impact.

Recovery Plan

The goals of the Recovery Plan were developed to align with the 2019 Cook County MJ-HMP, and specifically prioritizes the responsibility of officials under this plan to save lives, protect property, relieve human suffering, sustain survivors, repair essential facilities, restore services, and protect the environment. The plan acknowledges that hazard mitigation is an important priority and consideration during the rebuilding process.

Jurisdiction-Specific Natural Hazard Event History

The information provided below was solicited from the jurisdiction and supported by NOAA and other relevant data sources.

The *Natural Hazard Events Table* lists all past occurrences of natural hazards within the jurisdiction. Repetitive flood loss records are as follows:

- Number of FEMA-Identified Repetitive Loss Properties: 24 (22 Single Family, 1 Other Residential, 1 Other Nonresidential)
- Number of FEMA-Identified Severe Repetitive Loss Properties: 1 (1 Single Family)
- Number of Repetitive Flood Loss/Severe Repetitive Loss Properties That Have Been Mitigated: 0

Federal Disasters Declared

Disaster Declaration Number	Date Declared	Event
DR-227	4/25/1967	Tornado
DR-351	9/4/1972	Flood
DR-373	4/26/1973	Flood
DR-509	6/18/1976	Severe Storm(s)
DR-643	6/30/1981	Severe Storm(s)
DR-776	10/7/1986	Flood
DR-798	8/21/1987	Flood
DR-997	7/9/1993	Flood
DR-1129	7/25/1996	Severe Storm(s)
DR-1188	9/17/1997	Severe Storm(s)
DR-1729	9/25/2007	Severe Storm(s)
DR-1800	10/3/2008	Severe Storm(s)
DR-1935	8/19/2010	Severe Storm(s)
DR-1960	3/17/2011	Snow
EM-3068	1/16/1979	Snow
EM-3134	1/8/1999	Snow
EM-3161	1/17/2001	Snow
EM-3230	9/7/2005	Hurricane – Katrina Evacuation
EM-3435	3/13/2020	Biological
DR-4116	5/10/2013	Flood
DR-4489	3/26/2020	Biological
DR-4728	8/15/2023	Severe Storm(s)
DR-4749	11/20/2023	Flood

State Disaster Declarations

Date Declared	Event
7/26/2010	Severe Storms, High Winds, Torrential Rain
1/31/2011	Winter Weather
4/25/2011	High Wind, Tornadoes, Torrential Rain
5/25/2011	
4/18/2013	Severe Storms, Heavy Rainfall, Flooding, Straight-line Winds

4/20/2013	
4/21/2013	
4/25/2013	
4/30/2013	
1/6/2014	Heavy Snowfall, Frigid Temperatures
7/12/2017	Thunderstorms, Heavy Rainfall, Flooding
7/14/2017	
1/29/2019	Winter Storm
2/6/2020	Severe Storms
3/12/2020 – present (reissued	COVID-19
monthly)	
2/16/2021	Winter Storms
2/1/2022	Winter Storms
8/1/2022	Monkeypox
(reissued monthly through	
10/28/2022)	

TABLE: NATURAL HAZARD EVENTS					
Type of Event	FEMA Disaster Number (if applicable)	Date	Preliminary Damage Assessment/ Event Narrative		
Severe Weather	-	2/28/2017	\$500 in property damage		
Flood and Hail	-	5/20/2014	-		
Hail	-	1/28/2013	-		
Severe Winter Storm and Snow	DR-1960	3/17/2011	-		
Thunderstorm Wind	-	9/21/2010	-		
Severe Storms, Flooding	DR-1935	8/7/2010	-		
Severe Storms, Flooding	DR-1800	10/3/2008	-		
Levee Break	-	2008	-		
Lightning	-	7/23/2001	-		
Severe Winter Storm	EM-3161	1/17/2001	-		
Hail and Thunderstorm Wind	-	5/18/2000	-		
Winter Snow Storm	EM-3134	1/8/1999	-		
Flood	DR-1188	9/17/1997	-		
Flood	DR-1129	7/25/1996	-		
Severe Storms, Flood	DR-997	7/9/1993	-		
Severe Storms, Flood	DR-798	8/21/1987	-		
Severe Storms, Flood	DR-776	10/7/1986	-		
Severe Storms, Tornadoes, Flood	DR-643	6/30/1981	-		
Blizzards, Snowstorms	EM-3068	1/16/1979	-		
Severe Storms, Tornadoes, Flood	DR-509	6/18/1976	-		
Flood	DR-373	4/19/1973	-		
Flood	DR-351	9/4/1972	-		
Tornado	DR-227	4/25/1967	-		

Jurisdiction-Specific Hazards: Vulnerabilities and Impacts

Hazards that represent a county-wide risk are addressed in the Risk Assessment section of the 2024 Cook County Multi-Jurisdictional Hazard Mitigation Plan Update. This section only addresses the hazards and their associated impacts that are **relevant** and **unique** to the municipality.

Dam/Levee Failure: The community requires levee maintenance along the southern border of Calumet City on the Little Calumet River. Maintenance should include debris maintenance and animal damage. There are thousands of trees growing on the Calumet City levee. These trees pose a severe threat to the stability of this levee. The levee suffered a break in 2008 at parcels 30-29-201-062/063 on Shirley Ave.

Flood: The community requires maintenance of the Yates Ave. retention area. In addition, the community would benefit from providing knowledge to residents on backup prevention and program, and flash flood prevention.

Severe Weather: In order to protect the City's residents and infrastructure during high wind events, the City requires tree maintenance near power line easements citywide.

Severe Winter Weather: The community would benefit from residents being provided knowledge on the importance of clearing snow and not narrowing streets during snowstorms. Previously, these incidents have caused plows and emergency vehicles to not fit down streets. Similar to the case of snowstorms, the community would benefit from blizzard/heavy snow preparedness education. This could prevent travel future travel issues for plows and emergency vehicles.

2022: There were no significant natural hazard events in Calumet City in 2022.

Indicator	Number	Percent
Families in poverty	1,416	15.3%
People with disabilities	4,124	10.6%
People over 65 years	5,562	14.2%
People under 5 years	1,942	5%
People of color	35,906	91.6%
Black	29,922	76.3%
Native American	27	0.1%
Hispanic	5,683	14.5%
Difficulty with English	1,117	3%
Households with no car	1,824	12.1%
Mobile homes	424	2.8%

Data are from the U.S. Census Bureau, American Community Survey. See methods for more information.

The community evaluated whether vulnerability, and subsequently the potential impacts, in hazard-prone areas had increased, decreased, or remained the same for each natural hazard identified in this Hazard Mitigation Plan. Climate change, infrastructure expansion, and economic shifts that can affect vulnerability were considered. For example, if planned development is in an identified hazard area or is not built to the updated building codes, it may increase the community's vulnerability to future hazards and disasters. On the other hand, if development occurred with mitigation practices in place, the vulnerability may have remained the same or decreased. Additionally, shifting demographics were taken into consideration when assessing development trends.

Jurisdiction-Specific Climate Change Vulnerability and Impacts

The table below outlines if climate change, as assessed by the local planning team, has increased or decreased the municipality's vulnerability/exposure, and thereby the potential impacts, to each natural hazard over the past five (5) years (**Current Vulnerability**), and the effect of climate change in the future probability of occurrence and impacts (**Future Vulnerability**) from each natural hazard.

Future studies are needed to better understand the impact of climate change on the community's assets.

Hazard	Vulnerability	
Current Vulnerability		
Dam and Levee Failure	Remained the Same	
Drought	Remained the Same	
Earthquake	Not Applicable	
Flood (Riverine, Urban, Shoreline)	Remained the Same	
Severe Weather (Extreme Heat, Lightning, Hail,	Remained the Same	
Fog, High Wings)	Nemained the Same	
Severe Winter Weather (Ice Storms, Heavy Snow,	Remained the Same	
Blizzards, Extreme Cold)		
Tornado	Remained the Same	
Wildfire (Wildfire Smoke)	Remained the Same	

Hazard	Vulnerability
Future Vulnerability	
Dam and Levee Failure	No Change Anticipated
Drought	Increase
Earthquake	Not Applicable
Flood (Riverine, Urban, Shoreline)	Increase
Severe Weather (Extreme Heat, Lightning, Hail,	Increase
Fog, High Wings)	Iliciease
Severe Winter Weather (Ice Storms, Heavy Snow,	No Change Anticipated
Blizzards, Extreme Cold)	No Change Anticipated
Tornado	Increase
Wildfire (Wildfire Smoke)	Increase

<u>Jurisdiction-Specific Changes (or Expected Changes) in Development Trends in Hazard-Prone Areas</u>

The table below outlines if development, as assessed by the local planning team, over the past five (5) years (**Current Vulnerability**) has increased or decreased the jurisdiction's vulnerability/exposure, and thereby the potential impacts, to these natural hazards, and the anticipated effects changes in development may have on the future probability of occurrence and impacts (**Future Vulnerability**) from these natural hazards.

Hazard Vulnerability	
Current Vulnerability	
Dam and Levee Failure	Remained the Same
Drought	Remained the Same
Earthquake	Remained the Same
Flood (Riverine, Urban, Shoreline)	Remained the Same

Severe Weather (Extreme Heat, Lightning, Hail, Fog, High Wings)	Remained the Same
Severe Winter Weather (Ice Storms, Heavy Snow, Blizzards, Extreme Cold)	Remained the Same
Tornado	Remained the Same
Wildfire (Wildfire Smoke)	Remained the Same

Hazard	Vulnerability
Future Vulnerability	
Dam and Levee Failure	Not Change is Anticipated
Drought	No Change is Anticipated
Earthquake	No Change is Anticipated
Flood (Riverine, Urban, Shoreline)	Increase
Severe Weather (Extreme Heat, Lightning, Hail,	Increase
Fog, High Wings)	Iliciease
Severe Winter Weather (Ice Storms, Heavy Snow,	Increase
Blizzards, Extreme Cold)	Iliciease
Tornado	No Change is Anticipated
Wildfire (Wildfire Smoke)	No Change is Anticipated

The aging infrastructure in our community will continue to create a vulnerability concern if they are not addressed. Future climate change impacts may exacerbate this vulnerability by increasing the severity of severe storms and urban flooding. This vulnerability is generally with our population that is a Cohort 4 community by the Chicago Metropolitan Planning Commission which means the city is one of the poorer communities within the region. Additional resources and education may be needed to assist residents to be more resilient to the increased frequency of storms and potential flooding.

Hazard Risk Ranking

The Hazard Risk Ranking Table below presents the ranking of the hazards of concern. Hazard area extent and location maps are included at the end of this chapter. These maps are based on the best available data at the time of the preparation of this plan, and are considered to be adequate for planning purposes.

TABLE: HAZARD RISK RANKING		
Rank	Hazard Type	
1	Severe Weather	
2	Severe Winter Weather	
3	Tornado	
4	Flood	
5	Earthquake	
6	Drought	
7	Dam Failure	

New Mitigation Actions

The following are new mitigation actions created during the 2024 update.

Mitigation Action #23: Se	wer separation projec	t					
Lead	Supporting	Estimated	Potential	Estimated	Hazard(s) Mitigated:		
Agency/Department	Agencies/	Cost:	Funding	Projected	Flood (Riverine, Urban,		
Organization:	Organizations:	High	Source:	Completion	Coastal/Shoreline)		
Public Works			Hazard	Date:			
			Mitigation	Short-term			
			Grant				
			Program				
			(HMGP)				
Year Initiated		2024					
Applicable Jurisdiction		City of Calume	et City				
Applicable Goal		1,2,3,4,5,6					
Applicable Objective		1,2,3,4,6,9,12					
Cost Analysis (Low, Medi	um, High)	High	High				
Priority and Level of Impo	Priority and Level of Importance (Low,		High				
Medium, High)		Tilgii					
Benefits of the Mitigation	•	High					
Avoided or Issue Being Mit	igated)						
		Sewer separation project benefitting about 936 properties tributary to the					
		•		project would chang	_		
		the discharge point of the Superior Stormwater Basin from combined sewer to					
		a dedicated storm sewer culvert conveying					
-	Action/Implementation Plan and Project Description:		stormwater tributary to the Little Calumet River. Reconstruction of the Superior				
Description:			Basin via a new storm sewer down Stewart				
				existing Box culvert. 1			
		rehabilitated as required. Removing the Superior Basin					
		discharge from the combined sewer area will benefit over 1 square mile of the					
		City of Calumet City community and increase					

	stormwater resiliency for an estimated 40% of the properties in the City. The constructed line on Superior will allow us to explore additional separation with a block-by-block approach for streets west of Burnham Avenue.
Actual Completion Date or Ongoing Indefinite	
Project Status & Changes in Priority	
Completion status legend:	
N = New; I = In Progress Toward Completion;	N
O = Ongoing Indefinitely; C = Project Completed;	N
R = Want Removed from Annex; X = No Action	
Taken/Delayed	

Mitigation Action #24: Imp assist in providing stormw program.		-	-	~		
Lead Agency/Department Organization: Calumet City Public Works	Supporting Agencies/ Organizations:	Estimated Cost: Medium	Potential Funding Source: Hazard Mitigation Grant Program (HMGP)	Estimated Projected Completion Date: Short-term	Hazard(s) Mitigated: Flood (Riverine, Urban, Coastal/Shoreline)	
Year Initiated		2024	,	1		
Applicable Jurisdiction		City of Calumet City				
Applicable Goal		1,2,3,4,5,6				
Applicable Objective		1,3,6,12,13				
Cost Analysis (Low, Mediu	Cost Analysis (Low, Medium, High)		Medium			
Priority and Level of Importance (Low, Medium, High)		High				
Benefits of the Mitigation Project (Loss Avoided or Issue Being Mitigated)		High				

Action/Implementation Plan and Project Description:	Improve Stormwater Drainage System Capacity - Implementing a Green Infrastructure program to assist in providing stormwater relief and assist traditional stormwater infrastructure through the use of "Green Alley," program.
Actual Completion Date or Ongoing Indefinite	
Project Status & Changes in Priority	
Completion status legend: N = New; I = In Progress Toward Completion;	N
O = Ongoing Indefinitely; C = Project Completed;R = Want Removed from Annex; X = No Action	
Taken/Delayed	

Ongoing Mitigation Actions

During the 2024 update, these "ongoing" mitigation actions and projects were modified and/or amended, as needed.

Mitigation Action #1: Continue using the Floodplain Management Committee as a hazard advisory board to the City Council.							
Collect information and repo	Collect information and report on plan implementation to the City Council, participating offices, and the public.						
Lead Agency/Department Organization:	Supporting Agencies/	Estimated Cost: Low	Potential Funding	Estimated Projected	Hazard(s) Mitigated:		
Emergency Services and Disaster Agency	Organizations:		Source: General Fund, HMGP, BRIC	Completion Date: Short-term ongoing	Flooding		
Year Initiated		2014	•				
Applicable Jurisdiction	Applicable Jurisdiction		City of Calumet City				
Applicable Goal		1,4,6					
Applicable Objective		3, 4, 5, 6, 8, 10, 12, 13					
Cost Analysis (Low, Medium, High)		Low					
Priority and Level of Importa High)	Priority and Level of Importance (Low, Medium,						

Benefits of the Mitigation Project (Loss Avoided or Issue Being Mitigated)	Medium
Action/Implementation Plan and Project Description:	The Floodplain management Committee meets annually.
Actual Completion Date or Ongoing Indefinite	
Project Status & Changes in Priority	
Completion status legend:	
N = New; I = In Progress Toward Completion;	0
O = Ongoing Indefinitely; C = Project Completed;	
R = Want Removed from Annex; X = No Action	
Taken/Delayed	

Mitigation Action #2: Continue participation in CRS and Program Reviews; Building code review to improve Building Code Effectiveness Grading Schedule classification, community assistance visit by FEMA, cycle verification visit for CRS.					
Lead Agency/Department	Supporting	Estimated Cost:	Potential	Estimated	Hazard(s)
Organization:	Agencies/	Low	Funding	Projected	Mitigated:
Emergency Services and	Organizations:		Source:	Completion	Flooding
Disaster Agency			General Fund	Date:	
				Short-term	
				ongoing	
Year Initiated		2014			
Applicable Jurisdiction		City of Calumet City			
Applicable Goal		2,3,4			
Applicable Objective		3, 10, 11			
Cost Analysis (Low, Medium	, High)	Low			
Priority and Level of Importa High)	l of Importance (Low, Medium, High				
Benefits of the Mitigation Project (Loss Avoided or Issue Being Mitigated)		Medium			
Action/Implementation Plan and Project Description:		The Calumet City CR	S verification was	received on October	1, 2017
Actual Completion Date or C	ngoing Indefinite				

Project Status & Changes in Priority	
Completion status legend:	
N = New; I = In Progress Toward Completion;	
O = Ongoing Indefinitely; C = Project Completed;	
R = Want Removed from Annex; X = No Action	
Taken/Delayed	

Mitigation Action #3: Floodplain Regulations; review and enforcement.						
Lead Agency/Department	Supporting	Estimated Cost:	Potential	Estimated	Hazard(s)	
Organization:	Agencies/	Low	Funding	Projected	Mitigated:	
Floodplain Management	Organizations:		Source:	Completion	Flooding	
Committee, Dept. of			General	Date:		
Inspectional Services			Fund, FMA	Short-term		
				ongoing		
Year Initiated		2014				
Applicable Jurisdiction		City of Calumet City				
Applicable Goal		2, 3, 5				
Applicable Objective		1, 3, 4, 9, 10, 12, 13				
Cost Analysis (Low, Medium	, High)	Low				
Priority and Level of Importa	nce (Low, Medium,	High				
High)		1 11811				
Benefits of the Mitigation Pro	oject (Loss Avoided	Medium				
or Issue Being Mitigated)		1 Todiani				
Action/Implementation Plan	and Project	The City continues to review and enforce development in the floodplain.				
Description:		The Oity continues to review and emoree development in the floodplain.				
Actual Completion Date or C	Ingoing Indefinite					
Project Status & Changes in	Priority					
Completion status legend:						
N = New; I = In Progress Toward Completion;		0				
O = Ongoing Indefinitely; C = Project Completed;						
R = Want Removed from Annex; X = No Action						
Taken/Delayed						

Action C - 1.4

Mitigation Action #4: Flood Response Plan: Flood stage forecast map and new flood response procedures.							
Lead Agency/Department	Supporting	Estimated Cost:	Potential	Estimated	Hazard(s)		
Organization:	Agencies/	Medium	Funding	Projected	Mitigated:		
Emergency Services and	Organizations:		Source:	Completion	Flooding		
Disaster Agency			General	Date:			
			Fund, FMA	Short-term			
Year Initiated		2014					
Applicable Jurisdiction		City of Calumet City					
Applicable Goal		2, 3					
Applicable Objective		1, 5, 8, 9, 12					
Cost Analysis (Low, Medium,	, High)	Medium					
Priority and Level of Importa	Priority and Level of Importance (Low, Medium,		High				
High)	High)						
Benefits of the Mitigation Project (Loss Avoided		High					
or Issue Being Mitigated)		111611					
Action/Implementation Plan	and Project	No new procedures have been implemented.					
Description:		No new procedures have been implemented.					
Actual Completion Date or O	ngoing Indefinite						
Project Status & Changes in	Priority						
Completion status legend:							
	N = New; I = In Progress Toward Completion;						
O = Ongoing Indefinitely; C = Project Completed;		0					
R = Want Removed from Annex; X = No Action							
Taken/Delayed							

Action C - 1.5

Mitigation Action #5: Mitigation of Floodplain Properties - Properties exposed to flood damage shall be protected through property protection measures where regional structural projects are not feasible.

Lead Agency/Department Organization: Department of Inspectional Services	Supporting Agencies/ Organizations:	Estimated Cost: High	Potential Funding Source: General Fund, HMGP, BRIC	Estimated Projected Completion Date: Ongoing	Hazard(s) Mitigated: Flooding		
Year Initiated		2014					
Applicable Jurisdiction		City of Calumet City					
Applicable Goal		2,3					
Applicable Objective		1, 2, 6, 7, 9, 10					
Cost Analysis (Low, Medium		High					
High)	Priority and Level of Importance (Low, Medium, High)		Medium				
Benefits of the Mitigation Pro or Issue Being Mitigated)	Benefits of the Mitigation Project (Loss Avoided or Issue Being Mitigated)		High				
Action/Implementation Plan Description:	Action/Implementation Plan and Project Description:		No new properties have been mitigated.				
Actual Completion Date or O	ngoing Indefinite						
Project Status & Changes in Completion status legend: N = New; I = In Progress Towar O = Ongoing Indefinitely; C = P R = Want Removed from Anne. Taken/Delayed	d Completion; roject Completed;	, О					

Mitigation Action #7: Investigation of Critical Facilities to determine if buildings/facilities are located in hazardous locations.					
Lead Agency/Department	Supporting	Estimated Cost:	Potential	Estimated	Hazard(s)
Organization:	Agencies/	\$100,000; High	Funding	Projected	Mitigated:
Emergency Services and	Organizations:		Source:	Completion	All Hazards
Disaster Agency			General	Date:	
			Fund, HMGP,		
			BRIC		

	Long-term, Depending on funding
Year Initiated	2014
Applicable Jurisdiction	City of Calumet City
Applicable Goal	2,3
Applicable Objective	1, 2, 7
Cost Analysis (Low, Medium, High)	High
Priority and Level of Importance (Low, Medium, High)	Medium
Benefits of the Mitigation Project (Loss Avoided or Issue Being Mitigated)	High
Action/Implementation Plan and Project Description:	No new actions taken.
Actual Completion Date or Ongoing Indefinite	
Project Status & Changes in Priority Completion status legend: N = New; I = In Progress Toward Completion; O = Ongoing Indefinitely; C = Project Completed; R = Want Removed from Annex; X = No Action Taken/Delayed	0

Mitigation Action #8: Critical Facilities Emergency Response Plans. Provide advice and assistance on developing emergency					
response plans for the intere	ested critical facilitie	s regarding appropriat	te hazards.		
Lead Agency/Department	Lead Agency/Department Supporting Estimated Cost: Potential Estimated Hazard(s)				
Organization:	Agencies/	Low	Funding	Projected	Mitigated:
Emergency Services and	Organizations:		Source:	Completion	Multi-Hazard
Disaster Agency			General	Date:	
			Fund, HMGP,	Short-term	
			BRIC		
Year Initiated 2014					
Applicable Jurisdiction		City of Calumet City			

Applicable Goal	2,3,6
Applicable Objective	1, 2, 7
Cost Analysis (Low, Medium, High)	Low
Priority and Level of Importance (Low, Medium,	Lligh
High)	High
Benefits of the Mitigation Project (Loss Avoided	Medium
or Issue Being Mitigated)	Medium
Action/Implementation Plan and Project	No new actions taken.
Description:	No new actions taken.
Actual Completion Date or Ongoing Indefinite	
Project Status & Changes in Priority	
Completion status legend:	
N = New; I = In Progress Toward Completion;	0
O = Ongoing Indefinitely; C = Project Completed;	
R = Want Removed from Annex; X = No Action	
Taken/Delayed	

Mitigation Action #11: Safe Rooms and Sheltering: Residences, businesses, critical facilities, health care facilities, and schools should be considered. As needs are identified, the construction of safe rooms should be considered.						
Lead Agency/Department Organization: Emergency Services and Disaster Agency	Supporting Agencies/ Organizations:	Estimated Cost: High	Potential Funding Source: General Fund, BRIC, HMGP	Estimated Projected Completion Date: Long-term	Hazard(s) Mitigated: Tornado, Severe Weather, Severe Winter Weather	
Year Initiated		2014				
Applicable Jurisdiction		City of Calumet City				
Applicable Goal		1,2,3				
Applicable Objective	1, 3, 6, 8, 12					
Cost Analysis (Low, Medium	, High)	High				

Priority and Level of Importance (Low, Medium, High)	Medium
Benefits of the Mitigation Project (Loss Avoided or Issue Being Mitigated)	High
Action/Implementation Plan and Project Description:	The City advertises shelter locations on their website and facebook accounts.
Actual Completion Date or Ongoing Indefinite	
Project Status & Changes in Priority	
Completion status legend:	
N = New; I = In Progress Toward Completion;	0
O = Ongoing Indefinitely; C = Project Completed;	
R = Want Removed from Annex; X = No Action	
Taken/Delayed	

Mitigation Action #12: Promo encouraged to purchase and		• •	n 100-year and 50	00-year floodplains	should be	
Lead Agency/Department Organization: Department of Inspectional Services	Supporting Agencies/ Organizations:	Estimated Cost: Low	Potential Funding Source: General Fund, FMA	Estimated Projected Completion Date: Ongoing	Hazard(s) Mitigated: Flooding	
Year Initiated	1	2014				
Applicable Jurisdiction		City of Calumet City				
Applicable Goal		2,3,5,6				
Applicable Objective		4,6				
Cost Analysis (Low, Medium	, High)	Low				
Priority and Level of Importa High)	nce (Low, Medium,	m, High				
Benefits of the Mitigation Project (Loss Avoided or Issue Being Mitigated)		Low				
Action/Implementation Plan Description:	On/Implementation Plan and Project Cription: The City encourages the purchase of flood insurance in their annual newsletters.			eir annual		

Actual Completion Date or Ongoing Indefinite	
Project Status & Changes in Priority	
Completion status legend:	
N = New; I = In Progress Toward Completion;	
O = Ongoing Indefinitely; C = Project Completed;	
R = Want Removed from Annex; X = No Action	
Taken/Delayed	

Mitigation Action #13: Outrea advising, on-site visits, drain mitigation information.				· · ·		
Lead Agency/Department Organization: Department of Inspectional Services	Supporting Agencies/ Organizations:	Estimated Cost: Low	Potential Funding Source: General Fund	Estimated Projected Completion Date:	Hazard(s) Mitigated: All Hazards	
Year Initiated Applicable Jurisdiction		2014 City of Calumet City	,	Ongoing		
Applicable Goal Applicable Objective		2,6 6,8,11				
Cost Analysis (Low, Medium Priority and Level of Importa		Low				
High) Benefits of the Mitigation Pro		High				
or Issue Being Mitigated)		Low				
Action/Implementation Plan Description:	<u>, </u>	The City continues to send out newsletters, hosts a flood awareness week, emergency preparedness month and the library maintains references.				
Actual Completion Date or C						
Project Status & Changes in Priority Completion status legend: N = New; I = In Progress Toward Completion; O = Ongoing Indefinitely; C = Project Completed;		0				

R = Want Removed from Annex; X = No Action	
Taken/Delayed	

Mitigation Action #14: Specia	Mitigation Action #14: Special Public Information Projects: Additional public information projects.						
Lead Agency/Department	Supporting	Estimated Cost:	Potential	Estimated	Hazard(s)		
Organization:	Agencies/	Low	Funding	Projected	Mitigated:		
Emergency Services and	Organizations:		Source:	Completion	All Hazards		
Disaster Agency, Floodplain			General Fund	Date:			
Management Committee				Ongoing			
Year Initiated		2014					
Applicable Jurisdiction		City of Calumet City					
Applicable Goal		2,6					
Applicable Objective		6, 8, 11					
Cost Analysis (Low, Medium,	High)	Low					
Priority and Level of Importa	Priority and Level of Importance (Low, Medium,		112 al.				
High)		High					
Benefits of the Mitigation Pro	ject (Loss Avoided	Low					
or Issue Being Mitigated)							
Action/Implementation Plan	and Project	The City continues to	continues to send out newsletters, hosts a flood awareness week and				
Description:		emergency prepared	lness month.				
Actual Completion Date or O	ngoing Indefinite						
Project Status & Changes in	Priority						
Completion status legend:		0					
N = New; I = In Progress Toward Completion;							
O = Ongoing Indefinitely; C = Project Completed;							
R = Want Removed from Annex; X = No Action							
Taken/Delayed							

Action C - 1.17

Mitigation Action #17: When Lead Agency/Department	Supporting	Estimated Cost:	Potential	Estimated	Hazard(s)	
Organization:	Agencies/	Medium	Funding	Projected	Mitigated:	
Calumet City	Organizations:		Source:	Completion	Flooding,	
Administration			General Fund;	Date:	Severe	
			FEMA Public	Long-term	Weather	
			Assistance			
			(PA)			
Year Initiated	•	2014				
Applicable Jurisdiction		City of Calumet City	1			
Applicable Goal		2,3				
Applicable Objective		3, 6, 9				
Cost Analysis (Low, Medium	n, High)	Medium				
Priority and Level of Importa	nce (Low, Medium,	Medium				
High)		Medium				
Benefits of the Mitigation Pr	oject (Loss Avoided	Medium				
or Issue Being Mitigated)						
Action/Implementation Plan	n and Project	No new actions taken.				
Description:		INOTIEW ACTIONS LAKEN.				
Actual Completion Date or C	Ongoing Indefinite					
Project Status & Changes in	Priority					
Completion status legend:						
N = New; I = In Progress Toward Completion;		0				
O = Ongoing Indefinitely; C = Project Completed;						
R = Want Removed from Annex; X = No Action						
Taken/Delayed						

Action C - 1.18

Mitigation Action #18: Integrate the hazard mitigation plan into other plans, programs, or resources that dictate land use or redevelopment.

Lead Agency/Department	Supporting	Estimated Cost:	Potential	Estimated	Hazard(s)	
Organization:	Agencies/	Low	Funding	Projected	Mitigated:	
City Council	Organizations:		Source:	Completion	All Hazards	
			General Fund	Date:		
				Short-term		
Year Initiated		2014				
Applicable Jurisdiction		City of Calumet City				
Applicable Goal		4				
Applicable Objective		3, 4, 6, 10, 13				
Cost Analysis (Low, Medium	, High)	Low				
Priority and Level of Importa	nce (Low, Medium,	Ligh				
High)		High				
Benefits of the Mitigation Pro	oject (Loss Avoided	Medium				
or Issue Being Mitigated)						
Action/Implementation Plan	and Project	No new actions taken.				
Description:		140 HeW actions taken.				
Actual Completion Date or O	ngoing Indefinite					
Project Status & Changes in	Priority					
Completion status legend:						
N = New; I = In Progress Toward Completion;		0				
O = Ongoing Indefinitely; C = Project Completed;						
R = Want Removed from Annex; X = No Action						
Taken/Delayed						

Mitigation Action #21: Outreach should include prevention measures for citizens to reduce flood risk and damage.					
Lead Agency/Department Organization: ESDA	Supporting Agencies/ Organizations: Fire Department	Estimated Cost: \$20,000; High	Potential Funding Source: 406 fund	Estimated Projected Completion Date: Long-term	Hazard(s) Mitigated: Dam/Levee Failure, Flooding
Year Initiated		2019	1		
Applicable Jurisdiction		City of Calumet City			

Applicable Goal	1,2,4,6
Applicable Objective	6,9
Cost Analysis (Low, Medium, High)	High - Existing funding will not cover the cost of the project; implementation would require new revenue through an alternative source (for example, bonds, grants, and fee increases).
Priority and Level of Importance (Low, Medium, High)	High
Benefits of the Mitigation Project (Loss Avoided	High - Prevention of flooding through preventative measures. Project will
or Issue Being Mitigated)	provide an immediate reduction of risk exposure for life and property.
Action/Implementation Plan and Project	
Description:	
Actual Completion Date or Ongoing Indefinite	
Project Status & Changes in Priority	
Completion status legend:	
N = New; I = In Progress Toward Completion;	0
O = Ongoing Indefinitely; C = Project Completed;	
R = Want Removed from Annex; X = No Action	
Taken/Delayed	

Mitigation Action #22: City of Calumet City - Green Infrastructure.					
Lead Agency/Department Organization: MWRD	Supporting Agencies/ Organizations: Calumet City Administration	Estimated Cost: High	Potential Funding Source: General Fund, BRIC,	Estimated Projected Completion Date: Ongoing	Hazard(s) Mitigated: Flooding
Year Initiated	7.0	2019	HMGP	011801118	
Applicable Jurisdiction		City of Calumet City			
Applicable Goal		1			
Applicable Objective	13				
Cost Analysis (Low, Medium	High)	High			

Priority and Level of Importance (Low, Medium, High)	High
Benefits of the Mitigation Project (Loss Avoided or Issue Being Mitigated)	High
Action/Implementation Plan and Project	
Description:	
Actual Completion Date or Ongoing Indefinite	
Project Status & Changes in Priority	
Completion status legend:	
N = New; I = In Progress Toward Completion;	
O = Ongoing Indefinitely; C = Project Completed;	
R = Want Removed from Annex; X = No Action	
Taken/Delayed	

Completed Actions

Completed Mitigation Actions - An archive of all identified and completed projects, including completed actions since 2014.

Completed Action Items

The Department of Inspection Services will continue to administer the rebate program to encourage and assist property owners with protecting their properties from sewer backup. For every dollar spent by the City, \$2 will be spent to protect property from damage.

Levee Evaluation: Continue to mow and inspect levee on a regular basis. Pursue advice from the Army Corps of Engineers as to the long term rehabilitation of the levee. An analysis using the Corps' Levee Owner's Manual for Non-Federal Flood Control Works should be conducted.

Storm-water System Maintenance: Continue to maintain drainage channels and the Little Calumet River levee.

Staff Training: Pursue training seminars and conferences conducted by Illinois Association of Floodplain and Storm-water Management, Illinois Department of Natural Resources, Metropolitan Water Reclamation District of Greater Chicago and FEMA.

Maintain good standing under the National Flood Insurance Program by implementing programs that meet or exceed the minimum NFIP requirements. Such programs include enforcing the adopted flood damage prevention ordinance, participating in floodplain mapping updates, and providing public assistance and information on floodplain requirements and impacts.

Continue to support the county-wide actions identifies in this plan.

Actively participate in the maintenance of this plan.

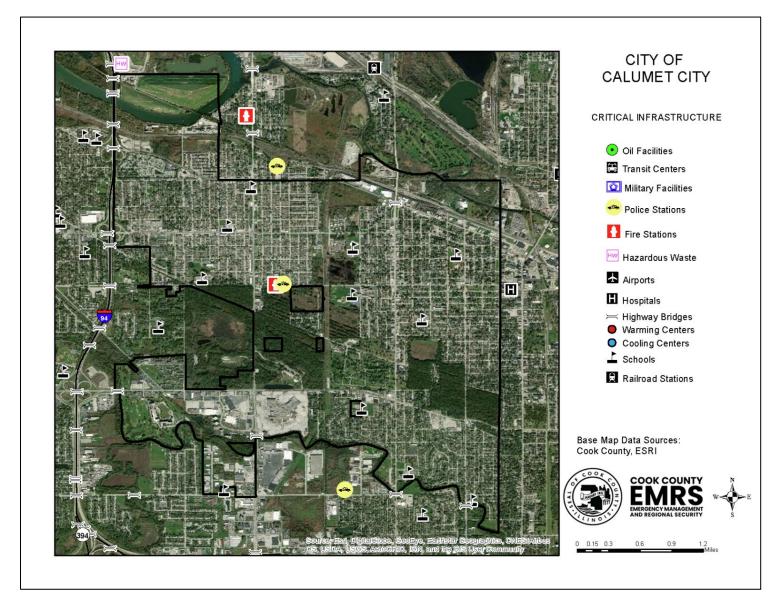
Future Needs to Better Understand Risk/Vulnerability

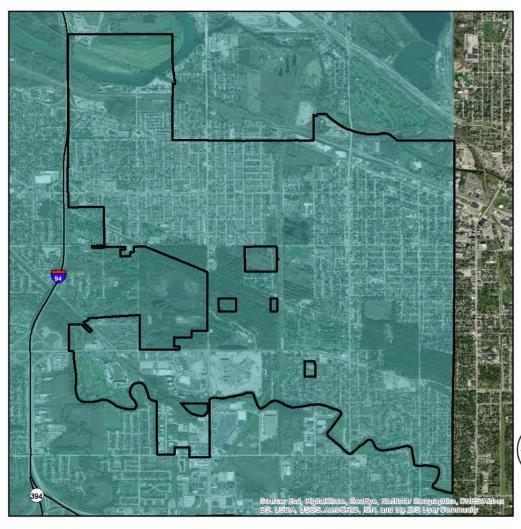
No needs have been identified at this time.

Additional Comments

No additional comments at this time.

Hazard Mapping





CITY OF CALUMET CITY

PEAK GROUND ACCELERATION FOR A 100 YEAR EARTHQUAKE EVENT

Mercalli Scale, Potential Shaking

II-III Weak

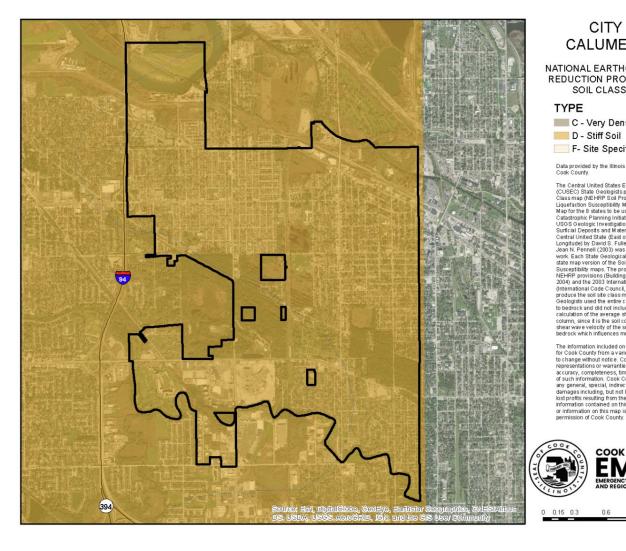
Data provided by the USGS Earthquake Hazards Program and Cook County.

Probabilistic selemic-hazard maps were prepared for the conteminous bindled States for 2014 portraying peak hort contain mous bindled States for 2014 portraying peak hort contain acceleration for 0.2 and 10-second periods with probabilities of exceedance of 10 percent in 50 years all of the maps were prepared by combining the hazard derived from spatially smoothed historical seismictly with the hazard from fault-specific sources. The acceleration values contoured are the random hort contail component. The reference stee condition is firm tock, defined as having an average shear-wave velocity of 760 m/s in the top 30 meters corresponding to the boundary between NEHEP (National Earthquake Hazards Reduction program) site classes B and C.

The information included on this map has been compiled for Cook Courty from a variety of sources and is subject to change without note. Cook Courty makes no representations or warranties, express of irrolled, as to accuracy, completeness, timeliness, or rights to the use of such information. Cook County shall not be lable for any general, special, indirect, incidental, or consequential damages including, but not inflated to, lost revenues or lost profits resulting from the use or misuse of the information contained on this map. Any sale of this map or information on this map is prohibited except by written permission of Cook County.



0 0.15 0.3 0.6 0.9 1.2 Miles



CITY OF **CALUMET CITY**

NATIONAL EARTHQUAKE HAZARD REDUCTION PROGRAM (NEHRP) SOIL CLASSIFICATION

C - Very Dense Soil, Soft Rock

F- Site Specific Evaluation

Data provided by the Illinois State Geological Survey and

The Central United States Earthquake Consortium (CUSEC) State Geologists produced a regional Soil Site Class map (WEHPR Solf Profe Type Map).

Liquefaction Susceptibility Map and a Soil Response Map for the 8 states to be used in the FEM New Madrid Catastrophic Planning Initiative Phase II work. The USGS Geologic Investigation Series I-2799 Map of Surficial Deposits and Materials in the Eastern and Central United State (East of 102 degrees West Longitude) by David S. Fullerton, Charles A. Bush and Jean N. Pennell (2003) was the base map used for this work. Each State Geological Survey produced its own state map version of the Soil Site Class and Liquefaction Susceptibility maps. The procedures outlined in the NEHPR provisions (Bullding Sesteric Safely Council, 2004) and the 2003 international Bullding Codes (International Code Council, 2002) were followed to produce the soil set class maps. CUSEC State Geological Survey bedrock in the column, since it is the soil column and the difference in shear wave velocity for the soils in companison to the The Central United States Earthquake Consortium shear wave velocity of the soils in comparison to the bedrock which influences much of the amplification.

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